

# COMMAND SUMMARY

**T**his appendix summarizes the command-line utilities presented in this book. Although all options are not included, the brief definitions in this quick-reference format should enable you to locate needed commands quickly.

To learn more about a command, use the `man` or `info` command with the command in question. For example, to learn about the `ls` command, enter `man ls` or `info ls`. Sometimes the man page will inform you that the info page is more up-to-date. If you are uncertain which command you need, try the `apropos` command with a keyword. This searches the man page database and reports all man pages (thus all commands) that include the keyword you entered.

---

## LINUX COMMANDS

Command name	Description	Useful options
<code>alias</code>	Assign a new name to a command.	
<code>apropos</code>	See a list of man pages that contain a given keyword.	
<code>at</code>	Set up a one-time task for later execution by <code>atd</code> .	<ul style="list-style-type: none"> <li>• <code>-l</code> lists all queued tasks (like <code>atq</code>).</li> <li>• <code>-d</code> removes a queued task (like <code>atrm</code>).</li> </ul>
<code>atq</code>	See the list of jobs submitted to <code>atd</code> using the <code>at</code> command.	
<code>atrm</code>	Remove a scheduled job from the queue of jobs to be executed by the <code>atd</code> command.	
<code>bash</code>	The default Linux shell.	
<code>batch</code>	Set up a scheduled task for future execution by the <code>atd</code> daemon when the processor load falls below a certain level.	
<code>bg</code>	Make the current process a background process of the current shell.	
<code>cat</code>	Print the contents of a file or files to STDOUT.	<code>-n</code> displays line numbers.
<code>cd</code>	Change directory.	

Command name	Description	Useful options
<code>chgrp</code>	Change the group assigned to a file or directory.	
<code>chmod</code>	Change the permissions assigned to a file or directory.	
<code>chown</code>	Change the user (owner) and optionally the group assigned to a file or directory.	
<code>clear</code>	Clear the screen.	
<code>cp</code>	Copy files or directories from one location or filename to another.	<ul style="list-style-type: none"> <li>• <code>-i</code> requests confirmation if the target file already exists.</li> <li>• <code>-r</code> copies directories to a new directory.</li> </ul>
<code>cpio</code>	Back-up utility, similar to <code>tar</code> .	
<code>crontab</code>	Submit a script with assigned times for repeated future execution by the <code>crond</code> daemon.	<code>-u</code> allows the <code>root</code> user to set a cron job for a specific user.
<code>date</code>	Display the system date and current time.	
<code>df</code>	Display file system information for all mounted standard file systems (not <code>swap</code> and <code>proc</code> ).	<code>-l</code> limits the listing of file systems to local file systems.
<code>dmesg</code>	Display the contents of the kernel ring buffer, where certain kernel messages are stored.	
<code>du</code>	Display usage information about the size of a directory and its subdirectories.	<code>-s</code> displays only a summary (total size).
<code>dump</code>	Back up data in a file system.	
<code>echo</code>	Display text to STDOUT.	<code>-n</code> prevents the standard new-line character at the end of the output.
<code>emacs</code>	A powerful text-mode editor.	
<code>exit</code>	Log out of a session or window.	
<code>export</code>	Make an environmental variable available to other processes.	
<code>fg</code>	Move a process to the foreground of the current shell, so that the output of the process is displayed.	
<code>file</code>	Display information about the content and file type of a file.	

Command name	Description	Useful options
<b>find</b>	Search for files with certain characteristics and list them or perform other actions on each one.	<ul style="list-style-type: none"> <li>• <b>-name filename</b> finds files with the specified filename.</li> <li>• <b>-print</b> prints the pathname for each file found.</li> <li>• <b>-type file type</b> finds files with the specified access type.</li> <li>• <b>-user username</b> finds files owned by the specified user.</li> <li>• <b>-perm permission code</b> finds files with the specified file permissions.</li> </ul>
<b>free</b>	Display the amount of free memory and swap space, with usage details on each.	<b>-t</b> includes a line with totals.
<b>ftp</b>	Access an FTP server using the file transfer protocol.	
<b>grep</b>	Search for a pattern using a regular expression within a file, group of files, or other input stream (using a pipe symbol).	<ul style="list-style-type: none"> <li>• <b>-c</b> displays the count of matching lines.</li> <li>• <b>-i</b> ignores case in the matches.</li> <li>• <b>-l</b> lists only filenames.</li> <li>• <b>-n</b> displays line numbers.</li> <li>• <b>-v</b> displays lines that do not match the pattern provided.</li> </ul>
<b>gunzip</b>	Uncompress a file that was compressed using <b>gzip</b> .	
<b>gzip</b>	Compress a file, adding the <b>.gz</b> file extension to it.	<ul style="list-style-type: none"> <li>• <b>-l</b> lists statistical details for each file being compressed.</li> <li>• <b>--fast</b> compresses more quickly.</li> <li>• <b>--best</b> creates a smaller compressed file.</li> </ul>
<b>halt</b>	Shut down all processes and halt the system so it can be powered off.	
<b>head</b>	Display the first 15 lines of a file.	<b>-n</b> displays the first <i>n</i> lines of the specified file.
<b>history</b>	Display recently used commands.	
<b>hostname</b>	Display the hostname of the system.	
<b>ifconfig</b>	Display or configure the networking interfaces that are part of the Linux kernel.	
<b>joe</b>	A full-screen text-mode editor.	
<b>kill</b>	Send a signal to a process; often used to end a process.	
<b>killall</b>	Send a SIGKILL signal to a process or processes started by the command name given as a parameter.	

Command name	Description	Useful options
<code>less</code>	Display STDIN (or a file) one page at a time.	
<code>lisa</code>	Caldera Systems' text-mode administration utility.	
<code>ln</code>	Create a link from one file or directory to another (both symbolic and hard links can be created).	
<code>locate</code>	Search an internal index of the file system for any files or directories matching the given string.	
<code>login</code>	Log in to the system using a user-name and password.	
<code>logout</code>	End a login session.	
<code>lpc</code>	Control the <code>lpd</code> line printer daemon, setting queuing and printing options for all defined printers.	
<code>lpq</code>	Display print jobs within a print queue.	<code>-Pprinter</code> defines the print queue to view.
<code>lpr</code>	Print a file.	<ul style="list-style-type: none"> <li>• <code>-Pprinter</code> defines the print queue to send the print job to.</li> <li>• <code>-#</code> defines the number of copies to print.</li> <li>• <code>-m</code> sends an e-mail message to the user when the print job has been completed.</li> </ul>
<code>lprm</code>	Remove a print job from a print queue.	<code>-Pprinter</code> defines the print queue from which the print job will be deleted.
<code>ls</code>	List the contents of a directory.	<ul style="list-style-type: none"> <li>• <code>-l</code> lists additional (long) format information about each item.</li> <li>• <code>-a</code> displays hidden files.</li> <li>• <code>--color</code> attempts to list files and directories with color codes by type.</li> <li>• <code>-i</code> display the inode number of each file.</li> </ul>
<code>make</code>	Compile or otherwise assemble the source code components of a program into a runnable binary file using a Makefile as instructions.	
<code>makewhatis</code>	Create a database of man pages for use by the <code>apropos</code> command.	
<code>man</code>	Display an online manual page for the given command.	

Command name	Description	Useful options
<code>mcopy</code>	Copy a file or files to or from the floppy disk drive.	
<code>mdel</code>	Delete a file or files from the floppy disk drive.	
<code>mdir</code>	List the files on a floppy disk drive.	
<code>mkdir</code>	Create a new subdirectory.	
<code>mke2fs</code>	Format a device with the <code>ext2</code> file system.	
<code>mkfs</code>	Format a device with the file system included as a parameter.	
<code>mkswap</code>	Format a device as swap space (virtual memory).	
<code>more</code>	Display STDIN (or a file) one page at a time.	
<code>mount</code>	Allow access to a named file system via a named directory mount point.	<ul style="list-style-type: none"> <li>• <code>-r</code> makes the file system being mounted read-only.</li> <li>• <code>-t</code> specifies the file system type (such as <code>ext2</code>).</li> </ul>
<code>mv</code>	Rename or move one or more files or directories.	
<code>passwd</code>	Set or reset the password for a user account.	
<code>pico</code>	A full-screen character-mode text editor with on-screen help.	
<code>pine</code>	A text-mode e-mail reading program.	
<code>ping</code>	Send a data packet to a network address to test whether that address is reachable.	<ul style="list-style-type: none"> <li>• <code>-c count</code> defines how many packets to send.</li> <li>• <code>-s packetsize</code> defines how many bytes should be in the packet.</li> </ul>
<code>printtool</code>	Set up a printer in Red Hat Linux (this is a graphical utility).	
<code>ps</code>	Display information about processes running on Linux.	<ul style="list-style-type: none"> <li>• <code>-A</code> displays information on all files.</li> <li>• <code>u</code> displays user-related fields.</li> <li>• <code>x</code> displays information on processes that have no controlling terminal.</li> <li>• <code>f</code> displays parent-child relationships of processes in a tree format.</li> </ul>
<code>pwd</code>	Display the current working directory.	

Command name	Description	Useful options
<code>rm</code>	Delete one or more files or directories.	<ul style="list-style-type: none"> <li>• <code>-i</code> requests confirmation before deleting each item.</li> <li>• <code>-r</code> deletes the contents of directories recursively.</li> <li>• <code>-f</code> forces deletion without confirmation.</li> </ul>
<code>rmdir</code>	Delete an empty directory.	
<code>route</code>	View or configure the static IP network routing table within the Linux kernel.	
<code>sed</code>	Edit files or STDIN input using patterns and commands.	
<code>shutdown</code>	Shut down the system, optionally providing a message or delay for users working on the system.	<ul style="list-style-type: none"> <li>• <code>-h</code> halts the system.</li> <li>• <code>-r</code> reboots the system.</li> <li>• <code>-c</code> cancels a previously scheduled <code>shutdown</code> command.</li> </ul>
<code>sort</code>	Sort lines in a file according to various options.	
<code>su</code>	Change to a new user account.	
<code>tail</code>	Display the last 15 lines of a file to STDOUT.	<code>-n</code> displays the last <i>n</i> lines of the specified file.
<code>tar</code>	Create an archive file containing one or more files or directories, optionally compressing them all.	<ul style="list-style-type: none"> <li>• <code>z</code> compresses the archive.</li> <li>• <code>f filename</code> gives the filename to work with.</li> <li>• <code>c</code> creates a new archive.</li> <li>• <code>x</code> extracts files from an existing archive file.</li> <li>• <code>v</code> gives verbose output (listing files).</li> </ul>
<code>telnet</code>	Connect to a telnet server to create a console-like dumb-terminal connection.	
<code>top</code>	Display the processes running on the system sorted with the most processor-intensive task listed first.	<ul style="list-style-type: none"> <li>• <code>-c</code> displays the command line that initiated each process.</li> <li>• <code>-i</code> ignores any idle processes.</li> <li>• <code>-s</code> runs <code>top</code> in secure mode, so no interactive keys function.</li> <li>• <code>-S</code> runs <code>top</code> in cumulative mode for the CPU time field.</li> </ul>
<code>touch</code>	Update the last accessed time for a file, or create an empty file if the named file does not exist.	<ul style="list-style-type: none"> <li>• <code>-a</code> updates the access time only.</li> <li>• <code>-c</code> prevents <code>touch</code> from creating a file that does not exist.</li> <li>• <code>-m</code> updates the modification time only.</li> </ul>

Command name	Description	Useful options
<code>umount</code>	Unmount a file system that is currently mounted as part of the Linux directory structure.	
<code>unzip</code>	Uncompress a file that has been created using the <code>zip</code> command.	
<code>updatedb</code>	Create an index of the entire file system for use by the <code>locate</code> command.	
<code>vi</code>	A powerful full-screen text editor.	
<code>vmstat</code>	Display virtual memory (swap space) statistics.	<code>-n delay</code> specifies the number of seconds to wait between automatic updates.
<code>wc</code>	Display the number of characters, words, and lines in a file or STDIN input stream.	<ul style="list-style-type: none"> <li>• <code>-c</code> displays only the number of characters (bytes).</li> <li>• <code>-l</code> displays only the number of lines.</li> <li>• <code>-w</code> displays only the number of words.</li> </ul>
<code>who</code>	Display a list of users who are currently logged in.	
<code>xload</code>	Display the current processor load from 0% to 100% as a small graphic.	
<code>xlsfonts</code>	Choose from among installed fonts (this is a graphical utility).	
<code>zip</code>	Compress one or more files into a single archive (the resulting file is compatible with ZIP files on Windows systems).	

